APPLICATION FOR TREATMENT AS A STATE AS TO REGULATORY ADMINISTRATION OF THE CLEAN WATER ACT, SECTION 303(c), WATER QUALITY STANDARDS PROGRAM

I. INTRODUCTION

In 1989, the Swinomish Indian Tribal Community, ("Tribe" or "SITC"), applied for and received recognition as a "state" under Section 106 of the Federal Water Pollution Control Act, ("the Clean Water Act"), codified as 33 U.S.C. § 1256, for the development of water quality protection programs. In 2001, the Tribe applied for and received recognition as a "state" under Section 319(h) of the Clean Water Act, codified as 33 U.S.C. § 1329(h), for non-point source management programs. Additionally, in 2003, the Tribe also applied for and received recognition as a "state" under section 105 of the Clean Air Act, 42 USC § 7405. The Tribe now seeks recognition as a "state" under Section 303(c), codified as 33 U.S.C. § 1313(c), and Section 401, codified as 33 U.S.C. § 1341, in order to implement its new Clean Water Standards ("Standards").

Before the Environmental Protection Agency ("EPA") may approve a tribe's exercise of regulatory authority under the Clean Water Act, the Tribe must qualify for treatment as a state ("TAS"). Section 518(e) of the Clean Water Act, codified as 33 U.S.C. § 1377(e), establishes the threshold requirements that tribes must meet to be treated as a state.[1] These requirements are expanded upon and laid out in more detail in 40 C.F.R. section 131.8:

> (1) The Indian Tribe is recognized by the Secretary of the Interior and meets the definitions in Sec. 131.3 (k) and (l),
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> (2) The Indian Tribe has a governing body carrying out substantial governmental duties and powers,
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> (3) The water quality standards program to be administered by the Indian Tribe pertains to the management and protection of water resources which are within the borders of the Indian reservation and held by the Indian Tribe, within the borders of the Indian reservation and held by the United States in trust for Indians, within the borders of the Indian reservation and held by a member of the Indian Tribe if such property interest is subject to a trust restriction on alienation, or otherwise within the borders of the Indian reservation, and
>
> (4) The Indian Tribe is reasonably expected to be capable, in the Regional

[1]Section 1377(e) provides that the Administrator of the EPA may grant a tribe status as a state provided that the following threshold requirements are met:

> (1) the Indian tribe has a governing body carrying out substantial governmental duties and powers; (2) the functions to be exercised by the Indian tribe pertain to the management and protection of water resources which are held by an Indian tribe, held by the United States in trust for Indians, held by a member of an Indian tribe if such property interest is subject to a trust restriction on alienation, or otherwise within the borders of an Indian reservation; and (3) the Indian tribe is reasonably expected to be capable, in the Administrator's judgment, of carrying out the functions to be exercised in a manner consistent with the terms and purposes of this chapter and of all applicable regulations. 33 U.S.C. § 1377(e).

Administrator's judgment, of carrying out the functions of an effective water quality standards program in a manner consistent with the terms and purposes of the Act and applicable regulations.

Here, because the Tribe has already received TAS recognition under sections 106 and 319(h) of the Clean Water Act, it need only provide information in this application that was not previously submitted. 40 C.F.R. section 131.8(b)(6). Nonetheless, for ease of review, the Tribe provides below an in-depth showing that it meets these four requirements for delegation of Section 303(c) Water Quality Standards and Section 401 Water Quality Certification program administration. The successful previous applications are also attached for reference. Previous Applications, attached as Exhibit 1.

II. THE SWINOMISH TRIBE MEETS ALL APPLICATION REQUIREMENTS UNDER 40 C.F.R. SECTION 131.8.

1. The Swinomish Tribe Is Recognized by the Secretary of the Interior.

The Swinomish Indian Tribal Community is a federally recognized Indian Tribe, reorganized pursuant to Section 16 of the Indian Reorganization Act of 1934 (25 U.S.C. 476), and is presided over by its constitutionally-formed governing body, the Swinomish Indian Senate.

The Swinomish Indian Tribe of the Swinomish Reservation, Washington is recognized in the Federal Register, Volume 70, No. 226, Friday, November 25, 2005. Notices by the Department of the Interior, Bureau of Indian Affairs as one of the Indian entities recognized and eligible to receive services from the United States Bureau of Indian Affairs, Federal Register Notice, attached as Exhibit 2.

2. The Swinomish Tribe Carries Out Substantial Duties and Powers Over a Defined Area.

A) Form of Tribal Government.

By authority of the Constitution, as amended, of the Swinomish Indian Tribal Community, the Swinomish Indian Senate is the governing body of the Tribe as shown in Article III, Section 1, of the Swinomish Constitution. Swinomish Constitution, attached as Exhibit 3.

Originally adopted in 1935, the Constitution, as amended, includes:

1. Tribal name and legal territory
2. Tribal membership requirements;
3. Governing body membership, organization, and powers;
4. Bill of rights including voting, equal opportunity, freedom of expression, and legal due process;
5. Tribal land ownership and leasing; and
6. Constitution and By-Law amendment process.

Under the adopted Bylaws, a description of the Senate organization includes:

1. Duties of elected officers;
2. Senate membership qualifications;
3. Time of annual election, General Council meeting, and Senate meetings;
4. Quorum requirements; and
5. Procedural requirements for adoption of ordinances and resolutions.

Senate members are nominated for election by a petition signed by at least five Community members. Primary elections for those Senate seats that have expired are held in February of each year, and the run-offs are then held in March on the day of the General Council meeting. All tribal members who are twenty-one years of age or older and who have either resided, as defined by tribal ordinance, west of Interstate 5 in Skagit County or maintained regular contact with the Reservation, are members of the General Council and may vote for Senators. Upon election, the Senators serve for a five-year period. Senate officers are internally elected. The Senate may appoint committees, delegate powers and duties to them, and require them to report to the Senate. A report of the past year's accomplishments and upcoming year's plan are reported to the Council by the Senate. Annual Report with Senate Roster, attached as Exhibit 4.

B) <u>The Swinomish Tribal Senate Performs A Wide Variety of Governmental Functions.</u>

SITC carries out substantial governmental duties. Examples of the governmental functions the SITC performs include law enforcement functions, functions related to health, education, and welfare, and functions related to zoning and environmental protection. To carry out these functions, the SITC employs some one hundred individuals, including police offers, medical professionals, managers, scientists, and all the other personnel necessary to carry out the duties of a sovereign Indian nation.

SITC has a republican form of government. Power is vested in the General Council, which consists of all members of the SITC of voting age. The General Council meets once a year. During the rest of the year, the General Council delegates its authority to the Senate, which consists of members of the General Council who are elected by secret ballot.

In terms of law enforcement and social services, the SITC employs ten police officers, including the Chief. It also employs a probation officer and a number of social workers who provide services that are often court-ordered, such as alcohol and domestic violence counseling. The SITC has a contractual arrangement to utilize the Skagit County jail and the jail of the Nisqually Indian Tribe for incarceration of persons convicted of crimes. As detailed below, the Planning Department and Housing and Utility Authorities also exercise considerable civil enforcement functions.

In terms of health, education, and welfare, the SITC employs a doctor, a dentist, three nurse practitioners, and about a dozen associated employees. The SITC has a daycare

program and a "Birth-to-Six" program. It also works extensively with nearby schools to help meet the unique needs of tribal youth. The SITC runs a satellite branch of the Northwest Indian College and has established a program designed to help students earn their GEDs.

SITC maintains tribal housing for the majority of tribal members who live in the area. SITC also supplies drinking water and sewage disposal for tribal members and non-tribal members who live in the more densely populated locations on the Reservation. SITC provides various social services, in addition to the ones previously mentioned, including mental health and alcohol counseling.

The SITC administers a zoning code, issues building permits and inspects new construction, and otherwise performs the functions of a planning or building department.

The Fisheries Office and the Skagit River System Cooperative, which is a cooperative venture with another Indian tribe, employ nearly two dozen individuals, including biologists, managers, and administrative staff to manage the fishing and hunting resources of the SITC and to conduct scientific research and monitoring regarding fisheries and habitat restoration.

In terms of taxation and eminent domain, SITC levies taxes on several of the different economic activities subject to tribal jurisdiction. Those taxes are: Utility Business Activity Tax, Retail Food and Beverage Tax, Tobacco Tax, Tribal Employment Rights Office (TERO) Tax, and Fish Tax. SITC reserves the right to exercise its inherent power of eminent domain.

C) The Tribe's Power to Perform Governmental Functions Is Supported by its Constitution and the Treaty of Point Elliott.

1) Article VI, Section 1 of the Tribe's Constitution.

The enumerated powers of the Senate are found in Article VI, Section 1 of the Constitution and authorize the Senate to act on the Tribe's behalf. In that regard, the Senate is empowered, inter alia, to:

i. Negotiate with Federal, State and local governments;
ii. Impose taxes and license fees upon members of the Community and upon non-members doing business within the Reservation;
iii. Promulgate and enforce ordinances governing the conduct of all persons within the Reservation providing for the maintenance of law and order and the administration of justice by establishing a Tribal Court system;
iv. Safeguard and promote the peace, safety, and general welfare of the Reservation by regulating the conduct of trade and use and disposition of property within the Reservation;
v. Cultivate and preserve native culture and Indian ceremonials;
vi. Adopt resolutions regulating procedure of the Senate, and of other Tribal

agencies and Tribal officials; and

vii. Delegate to subordinate boards any of the enumerated powers reserving the right to review any action taken thereunder.

2) Other Constitutional Provisions.

Additional Senate authority is found under its Future, Reserved, and Additional Powers, Article VI, Sections 3, 4 and 5 respectively. These sections empower the Tribe to:

i. Exercise powers delegated by the Secretary of the Interior or authorized agency of the government;
ii. Exercise the rights and powers vested in the tribes or bands of the Swinomish Indian Reservation, but not referred to in the Constitution; and
iii. Regulate all land uses within the Reservation.

3) The Treaty of Point Elliott.

The Treaty with the Duwamish, Suquamish, Etc., 1855, 12 Stat. 927, ("Treaty") was signed January 27, 1855, ratified by the U.S. Congress on March 8, 1859, and proclaimed by the U. S. President April 11, 1859. *See* Treaty, attached as Exhibit 5. Now known as the "Treaty of Point Elliott," this Treaty set aside SITC's reservation for the Tribe's exclusive use and occupation. Treaty of Point Elliott, Art. 2. Additionally, the Treaty confirmed SITC's fishing, hunting, and gathering rights. Treaty of Point Elliott, Art. 5. Specifically, the Treaty affirms the "right of taking fish at usual and accustomed grounds and stations . . . together with the privilege of hunting and gathering roots and berries on open and unclaimed lands." *Id.*

3. The Swinomish Tribe Has Substantial Authority to Regulate Water Quality and Other Aspects of the Environment.

A) The Regulatory Boundaries of the Swinomish Reservation.

1) Narrative Description of Boundaries

The Swinomish Reservation consists of all the lands and waters within the exterior boundaries of the Reservation, which are shown in the map below. The reservation includes the Swinomish Channel at least through the midpoint and extends to the extreme low water mark of the south, west, and north sides of the reservation, which border waterways. *See State v. Edwards*, 188 Wash. 467, 470-72, 62 P.2d 1094 (1936).

These exterior boundaries of the reservation were established by the Treaty of Point Elliot. The treaty describes the Reservation as "the peninsula at the

southeastern end of Perry's Island, called Shais-quihl." *See* Exhibit 5. Today, "Perry's Island" is known as Fidalgo Island.

Isaac Stevens, the first territorial governor of Washington Territory, drew a map of the Reservation at the same time he negotiated the Treaty on behalf of the United States. That map and other contemporary maps and correspondence describe the Swinomish Indian Reservation as that part of Fidalgo Island east of a line running from Fidalgo Bay due south to Similk Bay. This boundary line corresponds to a marshy intertidal area that connected Fidalgo and Similk Bays at the time the treaty was signed. Early maps depict what is now McGlinn Island as a peninsula on Fidalgo Island, rather than a separate island.

Subsequently, in 1875, President Grant diminished the boundaries of the Reservation by Executive Order on September 9, 1873. *See* Executive Order, attached as Exhibit 6. The Executive Order moved the northern boundary of the Reservation east so as to exclude the peninsula of land now known as March's Point from within the exterior boundaries of the Reservation.

In the early 1900s, the Army Corps of Engineers straightened and dredged the Swinomish Channel, cutting off the two oxbows to the north and McGlinn Island to the South and transforming the Channel from a water body that went dry during low tide to one that was navigable throughout the tidal cycles. Recently, SITC purchased the property interests in McGlinn Island with funds from a federal appropriation.

The regulatory boundaries of the Reservation[2] extend from the historical midpoint of the Swinomish Channel,[3] to the extreme low water mark of the southern and western waters surrounding the Reservation, to a line that trends east from the head of Turners Bay, then heads north to Padilla Bay. *See* Regulatory Boundaries Map below, and attached in Exhibit 7.

Today, the northern regulatory boundary of the Reservation is the line established by the Executive Order. The other boundaries, comprised of the marine waters of Padilla Bay, the historical midpoint of the Swinomish Channel, Skagit Bay, Similk Bay, and Turner's Bay, were established by the Treaty, reaffirmed by the Executive Order, and subsequently recognized by the Washington State Supreme Court. *See State v. Edwards*, 188 Wash. 467, 62 P.2d 1094 (1936). These regulatory boundaries, which are accurately reflected in the map below , circumscribe the area over which the Tribe wishes to assert authority to implement Clean Water Standards under Section 303(c), codified as 33 U.S.C. § 1313(c), and Section 401, codified as 33 U.S.C. § 1341, of the Clean Water Act.

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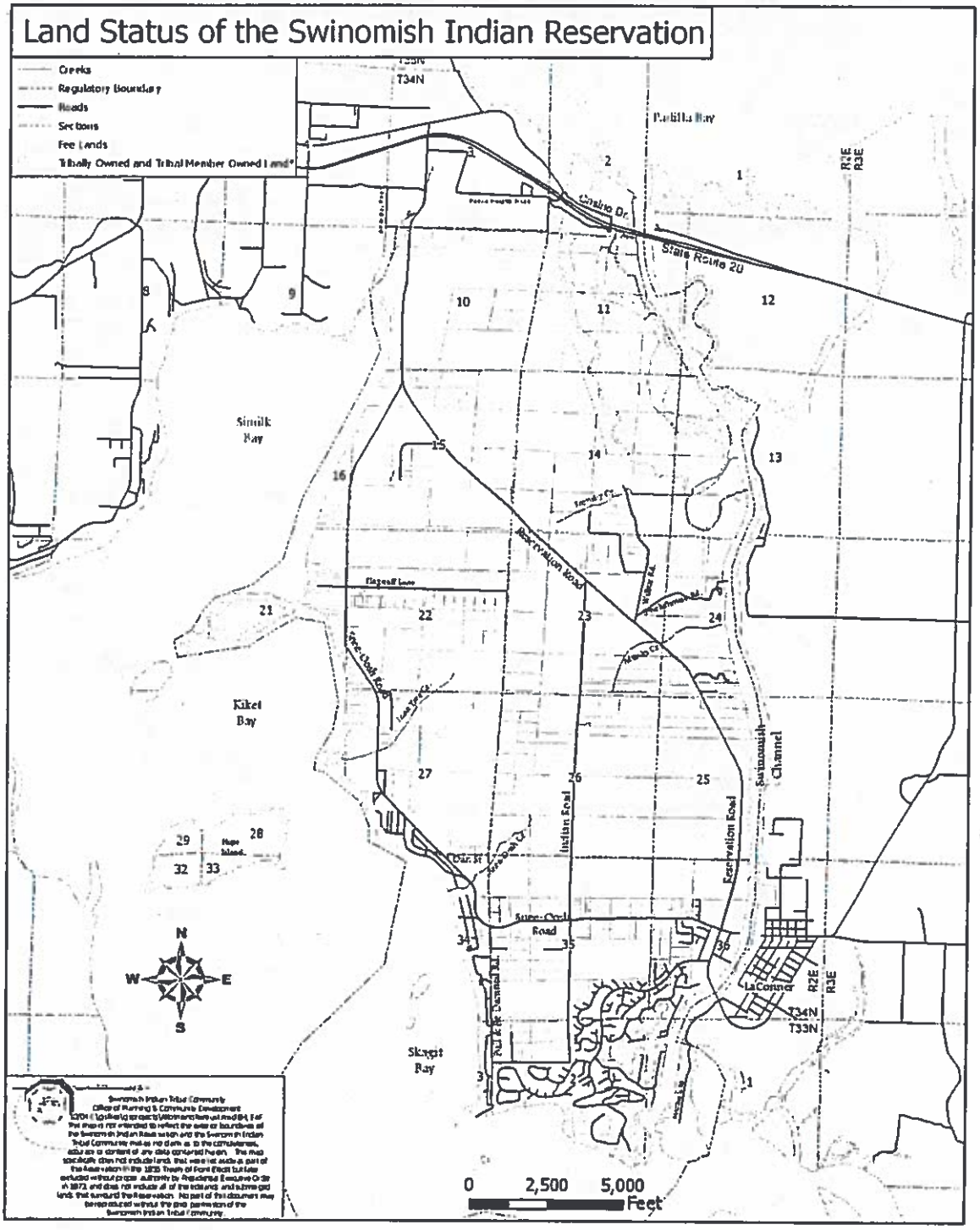
[2] The boundaries described in this section are for regulatory purposes only. The Tribe reserves the right to argue outside of the context of this Water Quality Standards TAS application that the actual reservation boundaries cover a greater area than those described herein.

[3] Although the Tribe believes the entire channel is included within the reservation boundaries, it is asserting regulatory authority, for TAS purposes, only to the historical midpoint of the Channel.

2) Map of Reservation Boundaries. (see below.)



* Tribal Trust Land, Individual Trust Land, and Tribal Fee Land

B) Legal Counsel's Statement Describing the Basis of the Tribe's Authority to Regulate Water Quality.

1) Introduction to Tribal Environmental Authority and Goals.

The Swinomish Tribal environmental authority, as evidenced by and through a variety of codes and ordinances, collectively encompasses: 1) land use zoning on all Reservation lands, 2) environmental assessment and performance standards for land use impacts, 3) adoption of air quality standards for the Reservation airshed, 4) management of Reservation ground water resources, and 5) permitting requirements for septic systems, waste disposal, solid waste sites, water and sewer systems, sport and crab fishing, biocide use, outdoor burning, industrial exhaust emissions, forestry, and development activities.

The long-range goals established for the protection of natural resources are:

i. To ensure an environment that is compatible with the purposes for which the Reservation was created.

ii. To promote the maximum fulfillment of traditional cultural and religious tribal values and the continuance of a heritage of balanced dependence of community members on the renewable resources of the Reservation.

iii. To preserve, enhance, rehabilitate and utilize the natural resources and ecological, recreational and aesthetic qualities of the Reservation; and to recognize an obligation to future generations in the comprehensive management of the natural resources.

iv. To further develop Tribal capability to administer and enforce protective and comprehensive management measures for Reservation resources. The Tribe will continue to balance environmental preservation and enhancement with the environmentally responsible development necessary to promote housing, employment, and economic activities.

2) Primary Tribal Ordinances through which the Tribal Government Exercises Its Environmental Authority.

Pursuant to the Tribe's constitutional authority and established environmental goals and policies, the Senate has adopted the following ordinances to provide a legal framework of the Tribe for protecting Tribal water resources. These are set forth below in chronological order, by Title:

Title 10. ***Public Health & Welfare***

1981 Health and Sanitation

Establishes domestic water and sewage disposal facility standards, food service regulations and sets other health and sanitation standards for activities within the Reservation and requires permits for certain categories of activities.

Title 11. ***Utilities.***

1989 Utility Authority
Creates the Utility authority to provide water and sewer services to reservation residents.

1989 Utility Commission
Creates five-member Utility Commission, composed of at least three reservation residents who receive utilities services and at least one tribal senator, to serve as the advisory and policy settling board for the Utility Authority.

1989 Reservation Utility Improvement Districts
Establishes the power of the Senate to create utility improvement districts within the boundaries of the reservation.

1989 Issuance of Bonds to Fund Utility Improvements
Authorizes the Tribe to issue bonds to fund utility improvement projects.

1989 Connection to Tribal Sewer System and Construction of Private Sewer Systems
Provides for mandatory connection to tribal sewer system within a specified area and for construction of a private septic system outside of that area. Establishes construction standards for private sewer systems and public health standards for disposal of waste.

1990 Reservation Sewer and Water Districts
Authorizes reservation sewer and water districts, specifically the acquisition, construction, maintenance, operation, development, reorganization, and regulation of water and sewer systems, including treatment and disposal plants and all necessary appurtenances and improvements thereto.

1992 Private Water Systems
Allows for construction of private water systems only outside of area served by tribal water system. Requires permit and inspection

for private water system and requires compliance with public health standards.

1992 Solid Waste Disposal
Defines illegal dumping and establishes standards for storage of solid waste on the reservation. Provides that the Utility Authority will enter a contract for trash collection in the reservation community.

Title 12. ***Building and Construction.***

2003 Storm-water Management
Establishes storm-water management planning and permitting requirements for specified types of new construction based on state standards.

2003 Ventilation and Indoor Air
Establishes ventilation system and indoor air quality requirements for new construction in order to protect respiratory health and improve air quality generally.

Titles 19-20. ***Environmental Protection, Land Use, and Zoning.***

1964 Planning Commission
Creates the Tribal Planning Commission, and initiates the processes of comprehensive planning. The Planning Commission reviews proposed development actions for consistency with land use and environmental regulations.

1977 Tribal Environmental Policy Act (TEPA)
Requires environmental review of actions to assess potential impacts to the Reservation environment, and sets out an environmental impact checklist, and a scoping and assessment procedure.

1977 Zoning
Delineates land use area designations and allowable uses. It also describes the land use development permit process.

1986 Coastal Zone Management Plan
In concert with the Comprehensive Land Use Plan, establishes goals, policies, performance standards, and permitting procedure for any land use activities within the Reservation boundaries, with special emphasis on impacts to shoreline and marine resources.

1992 Herbicides and Pesticides.
Requires a permit for any application of herbicides and pesticides

within the reservation, except for minor household use conducted in accordance with manufacturer directions.

2003 Clean Air Act
Adopts the Northwest Air Pollution Authority (NWAPA) regulations by reference for implementation of air quality standards for the Reservation airshed under the Clean Air Act.

Collectively, the Tribal Code and Tribal organizations establish environmental programs and regulations to protect Reservation resources. The ordinances and resolutions embodied in the Tribal Code and enacted pursuant to the Constitution, safeguard the health, safety, and welfare of the Reservation community from serious and substantial environmental resource degradation.

Tribal officials or bodies granted authority to enforce violations resulting from failure or willful conduct to comply with the aforementioned regulations are the Planning Department, Health Administrator, Board of Health, Sanitarian, Planning Commission, Senate, and Tribal Court. Specific enforcement authority is found in various Tribal ordinances, which describe criminal and civil offenses as well as infractions and provide penalties for violations. Furthermore, enforcement officials may enter upon regulated lands to make inspections, issue notices of violation and corrective actions, provide for a hearing, exact civil penalties, and correct a problem if the responsible party fails to do so.

3) Statement of Legal Counsel.

i. Background of the Swinomish Indian Tribal Community.

Of the Tribe's 7450-acre reservation, a significant majority (sixty-four percent) is tribally-owned, *i.e.* owned (1) by the United States and held in trust for the Tribe, (2) by the Tribe held in fee,[4] or (3) by the United States held in trust for tribal members. The remaining thirty-six percent is held in fee by non-members. The Tribe's long-term goal is to purchase more and more of the fee land, as it becomes available, for tribal use. In fact, the Tribe just completed a purchase of 750 acres of forest land. Several non-tribal businesses are located on leased tribal trust land, including a fish plant, a boatyard, and a campground. Additionally, a gated residential community is also located primarily on trust land.

Culturally, the Swinomish Tribe, like most other Coast Salish Tribes, has always been and continues to be heavily dependent on fisheries resources, especially native salmonids. As the Supreme Court stated in *United States v. Winans* with respect to Northwest tribes, fishing was "not much less necessary to the existence of the Indians than the atmosphere they

[4] The Tribe, rather than the State or County, has the sovereign right to regulate on-reservation land that is held in fee by the Tribe or a tribal member. *See generally Gobin v. Snohomish County*, 304 F.3d 909 (9th Cir. 2002).

breathed." *United States v. Winans*, 198 U.S. 371, 381 (1905). Traditionally, up to seventy percent of the Swinomish Tribe's subsistence came from fish and shellfish. Ruby, Robert H. and Brown, John A., *A Guide to the Indian Tribes of the Pacific Northwest* 230-31 (1986). Although the diets of tribal members have become much more diverse during the past century and a half, salmon and, to a lesser extent, shellfish are still culturally central to the Tribe. The Tribe's Chairman, Brian Cladoosby, and several other Tribal Senators are employed as professional fishers, as are numerous other tribal members. The Tribe issues roughly 450 licenses per year for salmon fishing, halibut fishing, and various types of shell fishing. An additional fifty plus licenses are issued annually for hunting. In 2005, fishing and shellfishing brought in a total of $3.1 million to the Tribe and tribal members, compared with $2.9 million in 2004. *See* Fish Management Swinomish Tribal Community 2005 Report, attached as Exhibit 8; Swinomish Fisheries Annual Report, attached as Exhibit 9. Smoked salmon is served at virtually every Tribe-sponsored dinner, and Dungeness crab is also served whenever it is in season. Designated uses for the on-reservation waters include but are not limited to aquatic life uses, shellfish harvesting, recreation, water supply uses, navigation uses, aesthetic uses, and spiritual/cultural uses.

ii. Current Legal Framework.

Federally recognized Indian tribes retain the right to civilly regulate both members and non-members within their reservations to the extent of their inherent sovereign authority. *See, e.g., Washington v. Confederated Tribes*, 447 U.S. 134, 152-154 (1980); *see also Montana v. United States*, 590 U.S. 544, 565-566 (1981). Although federal actions such as statutes and Supreme Court decisions may abridge tribes' inherent sovereign authority, by the same token, legislative enactments may restore such previously abridged sovereign authority. *See United States v. Lara*, 541 U.S. 193 (2004).

Through the Clean Water Act, Congress has recognized and affirmed the inherent sovereign authority of certain tribes to regulate discharge of pollutants into reservation waters. 33 U.S.C. § 1377(e); *see also* 56 Fed. Reg. 64,876, 64,878, 64,879 (1991);[5] Ann E. Tweedy, "Using Plenary Power

[5] The Environmental Protection Agency published these comments in the Federal Register before the *Lara* decision was issued. However, the Agency did note that it would "examine the Tribe's authority in light of the evolving case law." 56 Fed. Reg. 64876, 64878 (1991). Moreover, the Congressional Record clearly reflects that Congress was well aware of tribal authority to regulate non-member fee land on the reservation when it passed the CWA. *See* 133 Cong.Rec. H168-03 (1991) (memorandum from Duckeneauz/Broken Rope to Morris K. Udall, Chairman, Committee on Interior and Insular Affairs); 133 Cong.Rec. S733-02 (same). Finally, because, under Supreme Court case law, the holding in *Lara* applies retroactively; *see, e.g., Harper v. Va. Dep't of Taxation*, 509 U.S. 86, 97 (1993), the Environmental Protection Agency should examine post-*Lara* TAS applications in light of the Supreme Court's holding in *Lara*, just as the agency pledged to do when it adopted its TAS regulation. 56 Fed. Reg. 64876, 64878 (1991).

as a Sword: Tribal Civil Regulatory Jurisdiction under the Clean Water Act after *United States v. Lara*," 35 *Envtal L.* 171-190 (2005), attached as Exhibit 10. To qualify for the Clean Water Act's recognition of inherent tribal authority, a tribe must meet the requirements of 33 U.S.C. § 1377(e), namely, (1) the tribe must have a governing body carrying out substantial governmental duties and powers, (2) the water resources to be regulated "must be held by an Indian tribe, held by the United States in trust for Indians, or held by a member of an Indian tribe . . . " and (3) the tribe must be reasonably expected to be "capable of carrying out the functions to be exercised in a manner consistent with the terms and purposes of this chapter and of all applicable regulations." As amply demonstrated through the information provided in this application, the Tribe meets all of these requirements.

iii. The Tribe's Treaty Affirms Its Authority to Regulate Water Use.

The Swinomish Tribe's preexisting inherent sovereign authority to regulate environmental matters, specifically water resources, was recognized and affirmed in the Treaty of Point Elliott.[6] *See, e.g., Worcester v. Georgia*, 31 U.S. (Pet.) 515, 559 (1832) (recognizing that "[t]he Indian nations had always been considered as distinct, independent political communities, retaining their original natural rights, as undisputed possessors of the soil, from time immemorial"). The Tribe's authority to regulate water resources is a necessary outgrowth of several Treaty provisions. To begin with, both the Treaty provision stating that the Tribe's reservation is set aside for the Tribe's exclusive use and the related provision that the Tribe has the right to exclude others from the reservation implicitly recognize a right to regulate water quality. Treaty of Point Elliott, Art. 2. A third treaty provision, guaranteeing the Tribe that it will retain fishing, hunting, and gathering rights, also affirms tribal authority to regulate water quality. *Id.* at Art. 5.

First, the right to regulate water quality is inherent in the provision setting aside the reservation for the Tribe's exclusive use. *See, e.g., Colville Confederated Tribes v. Walton*, 647 F.2d 42, 52 (9th Cir. 1981). The Supreme Court has held that the setting aside of an Indian reservation also includes a set aside of the amount of water needed to accomplish the purposes of the reservation. *Winters v. United States*, 207 U.S. 564 (1908). This right applies to all water sources, including groundwater, that arise on, border, traverse, underlie, or are encompassed within Indian reservations, and the right also, in some cases, applies to off-reservation waters. *See* Felix Cohen, *Handbook of Federal Indian Law* 585 & n.51 (1982 ed.) and cases cited therein. Thus, the Tribe has a legal right to the amount of water necessary to fulfill the purposes for which the reservation

[6] As explained in *United States v. Winans*, a "treaty [is] not a grant of rights to the Indians, but a grant of right from them,--a reservation of those not granted." *United States v. Winans*, 198 U.S. 371, 381 (1905). Thus, the Treaty recognized existing, tribal sovereign rights, rather than creating new rights.

was created. Moreover, as the holder of a reserved water right, the Tribe has a concomitant legal right to protect reservation waters from degradation and contamination. *See, e.g., Tyler v. Van Aelst*, 9 Wash. App. 441, 442-44, 512 P.2d 760 (1973) (holding that the holder of a water right is entitled to an injunction preventing another party from degrading the quality of the water at issue); *see also Colville Confederated Tribes*, 647 F.2d at 52 (upholding Tribe's exclusive right, *vis a vis* the State, to regulate an on-reservation water source); *United States v. Washington*, 506 F. Supp. 187, 206 (W.D. Wash. 1980) (holding that tribal treaty fishing rights require the State to refrain from taking actions that would impair the habitat necessary to preserve the tribes' treaty-protected fishing right), *rev'd on other grounds* 759 F.2d 1353 (9th Cir. 1982); *Confederated Tribes of the Umatilla Reservation v. Alexander*, 440 F. Supp. 553 (D. Or. 1977) (issuing declaratory judgment that dam construction could not go forward without Congressional authorization because of harm to treaty-protected fisheries).

Second, the right to regulate water quality is a logical corollary of the Tribe's right to exclude nonmembers from its reservation. Because the Treaty recognizes and affirms that the Tribe has the sovereign right to exclude non-members from the reservation, the Tribe necessarily also has "the lesser power to regulate" water use on the reservation "in the interest of protecting the tribal community." *Brendale v. Confederated Tribes and Bands of the Yakima Indian Nation*, 492 U.S. 408, 433 (1989) (Stevens, J., plurality opinion) (noting that the right to exclude "necessarily must include the lesser power to regulate land use in the interest of protecting the tribal community").

Thirdly, the Tribe's authority to regulate water quality is also affirmed by the Treaty provision recognizing the Tribe's fishing, hunting and gathering rights. Treaty of Point Elliott, Art. 5. Specifically, Article 5 of the Treaty states that:

> The right of taking fish at usual and accustomed grounds and stations is further secured to said Indians in common with all citizens of the Territory, and of erecting temporary houses for the purpose of curing, together with the privilege of hunting and gathering roots and berries on open and unclaimed lands.

Id. The viability of the reservation lands and waters for fishing, shellfish gathering, waterfowl hunting, and gathering of roots and berries all depend, to differing degrees, upon high water quality. *See, e.g., Wisconsin v. Environmental Protection Agency*, 266 F.3d 741, 745 (7th Cir. 2001). Because these treaty rights could be impaired or even destroyed by poor water quality, the Tribe has the sovereign authority to protect them to the limits of its jurisdiction. *See, e.g., Colville Confederated Tribes*, 647 F.2d

at 48 (holding that tribe has a right to regulate on-reservation water use so as to protect its on-reservation fishery, the cultivation of which was one of the reasons for which the reservation was created); *United States v. Washington*, 384 F. Supp. 312, 403 (W.D. Wash. 1974) (holding that tribes have regulatory authority over treaty-protected fisheries); *see also United States v. Washington*, 506 F. Supp. 187, 206 (W.D. Wash. 1980) (holding that tribal treaty fishing rights require the state to refrain from taking actions that would impair the habitat necessary to preserve the tribes' treaty-protected fishing right), *rev'd on other grounds* 759 F.2d 1353 (9th Cir. 1982); *Confederated Tribes of the Umatilla Reservation v. Alexander*, 440 F. Supp. 553 (D. Or. 1977) (issuing declaratory judgment that dam construction could not go forward without Congressional authorization because of harm to treaty-protected fisheries); *Tyler v. Van Aelst*, 9 Wash. App. 441, 442-44, 512 P.2d 760 (1973) (holding that the holder of a water right is entitled to an injunction preventing another party from degrading the quality of the water at issue).

In sum, several treaty provisions reflect the Tribe's authority to regulate on-reservation water quality, including the provision setting aside the reservation for the Tribe's exclusive use, the provision that the Tribe retains the right to exclude non-members from the reservation, and the provision securing the Tribe's aboriginal hunting, fishing, and gathering rights.

Moreover, as discussed above, the Tribe's sovereign power to regulate water quality on its reservation was reaffirmed by Congress when it passed the Clean Water Act, which lays out three straightforward prerequisites to a tribe's being treated as a state: (1) the tribe's governing body carries out "substantial governmental duties and powers;" (2) the functions to be exercised by the tribe relate to water resources that are either within an Indian reservation, on tribally-owned land, or on land held in trust by the United States for the benefit of the tribe or a tribal member; and (3) the tribe "is reasonably expected to be capable . . . of carrying out the functions to be exercised in a manner consistent" with all applicable laws. 33 U.S.C. § 1377(e). Because the Tribe meets all of these prerequisites,[7] the CWA affirms its sovereign authority to regulate on reservation water quality. *See generally* Tweedy, *supra*, Exhibit 10. Finally, to the extent, if any, that the Tribe's sovereign authority to

[7] This application in its entirety amply demonstrates that the Tribe meets these requirements. As shown herein, the Swinomish Tribe has a governing body that carries out substantial governmental functions, including providing water and sewer services, zoning reservation lands, implementing air quality programs as well as nonpoint source management and water quality protection programs, regulating the fishing activities of its members both on and off the reservation, regulating environmental policy, and providing police and tribal court services, among many other functions. Additionally, the water bodies at issue are within the Tribe's reservation. Finally, given the breadth of the Tribe's governmental functions and its extensive experience regulating pursuant to the Clean Water Act and the Clean Air Act, as well as under the Tribal Environmental Policy Act and numerous other tribal codes, the Tribe can clearly be reasonably expected to act consistently with the Clean Water Act and all associated regulations.

regulate had been diminished between treaty time and the passage of the CWA, the CWA is properly viewed as restoring the Tribe's sovereign power to regulate water quality on the reservation. *See United States v. Lara*, 541 U.S. 193 (2004) 33 U.S.C. § 1377(e); *see also* 56 Fed. Reg. 64,876, 64,878, 64,879 (1991).

Although, based on the Supreme Court's analysis in *Lara*, the CWA is properly viewed as affirming and, as applicable, restoring tribal sovereign authority to regulate on-reservation water quality, thus rendering irrelevant the exceptions laid out in *Montana v. United States* as to the extent to which tribal civil regulatory authority has not been divested, this application nonetheless shows in detail below that the Tribe's regulation of on-reservation water quality meets the *Montana* test, as refined in subsequent cases, and that the Tribe's authority to regulate on-reservation water quality therefore remains fully viable, even without regard to the legal principals enunciated in *Lara*.

iv. Potential On-Reservation Discharges by Non-Members Threaten and Have a Direct Effect on the Health and Welfare of the Tribe.

In *Montana v. United States*, the Court recognized that tribes retain the ability to civilly regulate nonmembers on fee land within the reservation when their actions "threaten[] or ha[ve] a direct effect on the health or welfare of the tribe," as well as when the non-members have entered into a consensual relationship with the tribe. 450 U.S. 544, 566 (1981). This holding has been affirmed and expanded upon in subsequent decisions of the Court. *E.g., Nevada v. Hicks*, 533 U.S. 353 (2001); *Atkinson Trading v. Shirley*, 532 U.S. 645 (2001); *State v. A-1 Contractors*, 520 U.S. 438 (1991). While the *Montana* exceptions have been interpreted to be fairly narrow in scope in cases where there is little perceived threat to tribal self-government or to the tribe's health or welfare, *see e.g., Hicks*, 533 U.S. at 360 (upholding state officials' right to execute search warrant on the reservation); *Atkinson Trading*, 532 U.S. at 656-57 (striking down tribal tax on non-member business); *Strate*, 520 U.S. at 457-59 (holding that tribal court lacked jurisdiction to hear civil cases involving only non-members and noting that the tribe "was a stranger" to the litigation), such a narrow interpretation is inapposite when it comes to regulation of areas such as on-reservation water quality, which have an obvious potential to directly affect a tribe's health and welfare. *Wisconsin*, 266 F.3d at 747-48; *Montana v. Environmental Protection Agency*, 137 F.3d 1135, 1141 (9th Cir.), *cert. den.* 525 U.S. 921 (1998); *Montana v. Environmental Protection Agency*, 141 F. Supp. 2d 1259, 1263 (D. Mont. 1998); *see also Colville Confederated Tribes v. Walton*, 647 F.2d 42, 52 (9th Cir. 1981). Indeed, as the EPA recognizes, degradation of water quality has the potential to utterly destroy the suitability of the reservation as a tribal homeland, thereby depriving the Tribe of a primary benefit of its treaty, as well as to seriously impair its hunting and

fishing rights, which are also protected under the treaty and are centrally important to the Tribe's culture. *See* Environmental Protection Agency, 56 Fed. Reg.64,877-78 (1991) (codified at 40 C.F.R. § 131.8(b)(3)); *see also Montana*, 137 F.3d at 1139 (upholding EPA's interpretation).

To satisfy TAS requirements and to show that it retains the power to regulate water quality under *Montana* and its progeny, the Tribe is not required to show that pollution of its invaluable water sources is currently occurring or even that it is imminent. *Montana*, 141 F. Supp. 2d at 1262. Rather, the Tribe need simply show that such pollution from a non-member source could occur in the future and that, if it did, it would likely have "serious and substantial impacts" on the Tribe. *Id.* (citations and internal quotation marks omitted). There is no doubt that that Tribe meets this burden.

Thirty-six percent or almost 2,700 acres of reservation land is held in fee by non-members. Much of that land is currently classified as rural residential. Other current fee land uses include forestry, agriculture, and urban residential. Additionally, several non-tribal businesses are located on leased tribal trust land, including a fish processing plant, a boatyard, and a campground. Many non-tribal residences are also located on trust land, including a gated residential community. Finally, a small portion of trust land is leased by non-members for agricultural use. As shown below, activities by non-members on both trust and fee land have the potential to directly affect the Tribe's health and welfare and economic security and to have serious and substantial impacts upon the Tribe.

- Residential Use.

Residential use can cause serious water quality problems in its own right. Chemicals commonly applied by residential users, such as pesticides, herbicides, and fertilizers, make their way to streams where they increase temperatures, turbidity, bacteria and nutrients and decrease the levels of dissolved oxygen. Transmission of these substances to streams and other water bodies is especially likely in rainy Western Washington, where the reservation is located. Similar effects result from failing septic tanks, which have been a serious problem in Similk and Turner's Bays where shellfishing areas have had to be closed due to fecal coliform levels that exceed Washington Department of Health safe levels. Furthermore, residential use almost invariably results in increased impervious surface. The water quality problems caused by increased impervious surface are well-documented and include: increased erosion, increased toxic load, increased sediment load, increased temperature, increased flooding, diminished groundwater reserves, diminished areas for habitat, diminished fish populations, and diminished surface water levels. Finally, residential use also may result in land disturbances, such as clearing and grading, which can increase run-off and/or infiltration, both of which change flow

patterns and increase the likelihood that the above-identified pollutants will enter watercourses and/or groundwater.

- Agricultural Use.

Agricultural land use also brings with it a host of water quality problems. Like residential use, agricultural use results in increased chemical and nutrient application, causing eutrophication, which in turn results in decreased dissolved oxygen and increased temperature, turbidity, and toxics. Agricultural use also is associated with land disturbances, such as tilling and grading, which often increase run-off and/or infiltration, as well as the potential for chemicals to enter waterways and/or groundwater. Finally, agricultural use, particularly hobby farms, result in the introduction of animal waste into streams and groundwater sources. This increases the bacteria and nutrient levels in the watercourses.

- Forestry.

Forestry uses, such as logging, also cause water quality problems. Like agricultural and residential use, forestry is associated with both increased chemical application and land disturbances. In the case of forestry, the land disturbances include tree removal and grading of roads. Because cutting down trees also decreases water absorption by trees and grading of roads increases impervious surface, forestry also causes increased run-off and erosion. Thus forestry results in decreased dissolved oxygen and increased temperature, turbidity, run-off, and toxics.

- Illegal Dumping and Transportation.

Both illegal dumping and transportation uses have the potential to adversely impact water quality. Illegal dumping is the disposal of household waste and hazardous materials in locations other than a regulated disposal facility. Transportation uses include general purpose and commercial automobile and truck traffic on roads and driveways, boat traffic in waterways, train traffic on railroads, and conveyance of fuel in pipelines. These practices may result in: increased roadway run-off; automobile, truck, train, and boat wastes; oil pipeline discharges; fuel or cargo spills on roads, rails, or in waterways; and boat discharges. Such occurrences cause increased turbidity, toxics, and runoff.

- Commercial/Industrial Use.

Like many other types of uses, commercial and industrial use can involve chemical application, including pesticides, herbicides, and fertilizers, which increase water temperature, dissolved oxygen levels and turbidity. Chemical and industrial use, especially related to operation of machinery,

is also commonly associated with commercial use. This can increase the level of toxics in water sources. Finally, commercial and industrial use almost invariably increases impervious surfaces, which in turn results increased run-off. Increases in run-off change the flow patterns of streams. Additionally, increased run-off increases the likelihood that damaging materials will make their way to surface water sources because the water would otherwise be cleansed by filtering through the ground.

♦ Urban Residential Use.

Urban residential use increases impervious surfaces, thereby increasing run-off and the likelihood that damaging materials will enter watercourses. Urban use also increases the likelihood of gasoline and oil run-off from cars and trucks, as well as the likelihood of chemical application, including pesticides, herbicides, and fertilizers. Thus, collectively, urban use causes increases in temperature, turbidity, quantity of water in the streams during rainy periods (due to increased run-off), and toxics, and it decreases dissolved oxygen,.

The potential effects described above are both serious and substantial and, should they come to pass, would have a direct, extremely detrimental effect on the Tribe's health and welfare. Accordingly, under the CWA and the regulations adopted by the EPA, the Tribe has met its burden to show that it has the sovereign authority to regulate water quality within reservation boundaries. The Tribe's application for TAS should be approved.

v. Potential On-Reservation Discharges by Non-Members Would Also Have Serious and Substantial Effects on the Tribe's Economic Security.

As stated above, fishing and shell fishing bring in $3 million to the Tribe and tribal members annually. Exhibits 8 & 9. Needless to say, almost any small community would be significantly affected by the loss of such a substantial amount of revenue. However, the average income among members of the Swinomish Tribe, like those of many tribes, is well below the average income of non-members in Skagit County, which is adjacent to the reservation, and other nearby areas. In 1993, before tribal shell fishing was judicially approved in Washington, an economist noted that, on average, thirty-three percent of tribal members from select tribes (including the Swinomish Tribe) lived in poverty compared to a State average of eleven percent and a national average of thirteen percent. *See* Philip A. Meyer, "Analysis of the Material Circumstances of 17 Washington Tribes (July, 1 1993), at 12, attached as Exhibit 11. Mr. Meyer estimated that permitting tribes collectively to take a fifty percent share of shellfish, as was subsequently allowed, *United States v. Washington*, 873 F. Supp. 1422 (W.D. Wash. 1994), *aff'd in part and rev'd in part* 157 F.3d 630 (9th 1998), would raise the tribal per capita income by over $2,000, which equated to an average increase in income of over thirty percent. Exhibit 10, at 30; *see also*

Excerpt adapted from Meyer Resources, Inc., 1997. "Northwest Tribal Values on the Land: A Study of Values that Northwest Tribes Associate with Streams, and with Associated Land Areas in Watersheds. A Report to the Northwest Indian Fisheries Commission, Olympia, WA," attached as Exhibit 12 (discussing the value of water resources to support fisheries for Northwest Tribes).

A 2005 report by Mr. Meyer indicates that thirty-six percent of Swinomish members now live in poverty (compared to eleven percent of Washington State residents). *See* Philip A. Meyer, "A Review of Two Documents from the Washington Department of Ecology" (March 15, 2005), at 5, attached as Exhibit 13. This figure is corroborated by a 2001 Bureau of Indian Affairs unemployment statistic for the Tribe of nearly 42%. *See* Letter from DSHS, attached as Exhibit 14. Clearly, to those living at or near the poverty level, as over a third of the Tribe's nearly 800 members currently do, a loss of almost three million dollars, which would hit both individual tribal member income and tribal governmental services (because of lost tax revenue), would be devastating.

As detailed above, non-member activities have the potential to seriously and substantially harm tribal waters, which would, in turn, as has happened in the past with the septic failures in Turner's and Similk Bays, impair the fisheries resources that are economically and culturally invaluable to the Tribe. Thus, based on the figures cited above and the paramount importance of finfishing and shellfishing to the Tribe, there is no question that on-reservation discharges by non-members have the potential to have serious and substantial effects on the Tribe's economic security.

vi. Numerous Non-Members Who Live or Work On-Reservation Have Entered Consensual Relationships with the Tribe.

In addition to jurisdiction under the *Montana* exception for matters that are likely to adversely affect a tribe's economic security or health or welfare, the Tribe also has authority to regulate non-members on tribal land because they have entered consensual relationships with the Tribe by leasing its land. As *Montana* held: "A tribe may regulate,. . . . the activities of nonmembers who enter consensual relationships with the tribe or its members, through commercial dealing, contracts, leases, or other arrangements." 450 U.S. at 565. Not only does the Supreme Court in *Montana* specifically mention leases, but other courts have held that such commercial dealing is the gravaman of the consensual relationship exception. *United States ex rel. Morongo Band of Mission Indians v. Rose*, 34 F.3d 901, 906-07 (9th Cir. 1994); *see also Atkinson Trading Co., Inc. v. Shirley*, 532 U.S. 645, 655 (2001). Moreover, the requirement that the challenged regulation have a nexus to the consensual relationship, *Atkinson Trading Co., Inc.*, 532 U.S. at 656, is also met here because numerous residential and business leases contain a requirement that the lessee (and in some cases, their customers as well) abide by tribal laws.

For example, the lease of a one hundred plus acre campground requires the lessee to "post the subject property notifying . . . members that they are subject to Tribal laws and law enforcement while present within reservation boundaries." Lease Amendment No. 2 to Campground Lease, ¶ XXXI, attached as Exhibit 15. Similarly, numerous residential leases contain language requiring the lessee to abide by tribal law as a condition of the lease. One common clause is that "[i]t is a condition of this lease that the Lessee shall faithfully comply with all ordinances or resolutions, as approved by the Secretary of the Interior, enacted by . . ." the Swinomish Indian Tribal Community. *See* Samples of Residential Leases ¶ 18, attached as Exhibit 16. Such leases also contain a provision requiring the lessee to "promptly pay all taxes, assessments, license fees and other like charges levied against the Lessee by the Tribe during the term of the lease." *Id.* at ¶ 19. Another common provision of residential leases is captioned "Observance of Law" and requires the lessee to "observe and adhere to all laws, ordinances, rules and regulations now or hereafter adopted by the Swinomish Indian Tribal Community." More Samples of Residential Leases, § 4, attached as Exhibit 17. Similarly, the two master leases for the planned residential community both require the lessee to "comply with all applicable water pollution control laws . . . in the construction of all sewerage systems, sewerage treatment or disposal plants or systems, or in the improvement or extension of any sewerage plant or sewage treatment or disposal plants. *See* Excerpts of Lease Numbers 5020 and 5086, attached as Exhibit 18.

Clearly, by signing these leases, non-member lessees enter consensual relationships that subject them to tribal civil regulatory jurisdiction, including regulation under the Clean Water Act. There is no question but that such lessees fall under *Montana*'s exception for those who have entered consensual relationships with the Tribe.

Thus, the Tribe has civil regulatory jurisdiction over non-members found on the reservation on multiple bases. First, Tribes have jurisdiction under the Clean Water Act and *United States v. Lara* because the Clean Water Act recognized and affirmed tribal sovereignty over on-reservation water quality. Second, the Tribe has civil regulatory jurisdiction under *Montana* on three bases: (1) the potential effect of water quality problems caused by non-members on the Tribe's health and welfare; (2) the potential effect of such water quality problems on the Tribe's economic security; and (3) the fact that numerous non-members found on the reservation have entered consensual relationships with the Tribe that have a sufficient nexus to the proposed regulatory authority to establish jurisdiction.

4. The Tribe Proposes to Establish Water Quality Standards for the On-Reservation Portion of the Following Surface Waters.

Some of the descriptions below pertain to the entire water body, despite the fact that only a portion of it is on the reservation. Consistent with the Clean Water Act, the Tribe seeks to apply its water quality standards to only those portions of the water bodies within the

reservation, as described in Part II.C.1.

A) Listing of Water Bodies.

1. Padilla Bay
2. Padilla Bay lagoon
3. Similk Bay
4. Turner's Bay
5. Kiket Bay
6. Lone Tree Lagoon
7. Lone Tree Creek
8. Skagit Bay
9. Skagit River Delta
10. Snee-Oosh Creek
11. Swinomish Channel
12. Munks Creek
13. Fornsby Creek
14. Others:
    Named and unnamed palustrine and marine wetlands
    Named and unnamed intermittent streams
    Unnamed springs and seeps
    All delineated, inventoried, undelineated, and uninventoried wetlands.

B) Division of Ownership, Description, Water Quality, Tribal Water Resource Use, Environmental Sensitivity Status of Named Waterbodies[8]

1) Padilla Bay and Lagoon

i. Approximate division of ownership on the Reservation.

The entire Padilla Bay watershed encompasses 23,000 acres, 118 of which are within the regulatory boundaries of the Swinomish Reservation. The land adjoining the bay within the regulatory boundaries of the Reservation has approximately three-fourths of the shoreline in tribal trust land, and one-forth of the shoreline in individual trust land. The Padilla Lagoon is located west of the Swinomish Casino and in between the individual and tribal trust land. The Padilla Lagoon is located west of the Swinomish Casino and in between the individual and tribal trust land.

ii. Description.

Padilla Bay is a shallow estuarine bay located between Samish and Fidalgo islands. The portion of Padilla Bay within the Reservation

[8] With the exception of tidelands on the east side of Turner Bay, which are privately owned, all of the applicable tidelands between the Ordinary High Water Mark and the Extreme Low Water Mark are owned by the United States in trust for the Tribe.

regulatory boundary is a shallow, very gently sloping, channeled mudflat that supports extensive eelgrass beds and salt marshes, and includes the Padilla Lagoon. Much of the bay de-waters at low tide, particularly the Lagoon. A navigable channel was excavated across the mudflats connecting the Swinomish Channel to deep water. The net northerly flow of the Swinomish Channel, which includes a portion of Skagit River water, also enters and mixes with Padilla Bay water. Heron, bald eagles, peregrine falcons, and other birds nest and feed within the watershed. The rich mudflats of Padilla Bay also support salmonids and other aquatic life (Cordell, 1986).

iii. Water Quality.

Surface water quality within Padilla Bay is generally good based on available data. Localized fecal coliform problems in Padilla Bay and Lagoon have been detected but have not reached beyond maximum exceedence criteria based on draft Tribal water quality standards. The fecal coliform problems are likely the result of ongoing non-point source pollution as well as a known failed septic system nearby. Turbidity has exceeded proposed water quality standards.

Padilla Lagoon has experienced some very high temperatures that are likely due at least in part to natural conditions that result in low dissolved oxygen. Turbidity and pH water quality criteria problems are also likely partly caused by natural conditions in shallow marine waters and wetlands.

In addition to temperature-related problems, a toxics in marine sediments screening s conducted by the Water Resources Program in 2002 suggested that low levels of metals and volatile organic compounds are present in the Padilla Lagoon. Several of the chemicals sampled at the Padilla Bay Lagoon exceeded one or more of the criteria guidelines. Further study has been recommended to determine the extent of potential health risks. Leachate from the Whitmarsh dump, surface runoff from the railroad bridge and nearby parking lots, and agricultural and industrial runoff into Padilla Bay are potential sources of contamination at this site (Noffke, 1998a).

Like Padilla Lagoon, Padilla Bay is at risk from adjacent land uses off Reservation that include oil refineries, crop and dairy agriculture, and the abandoned Whitmarsh landfill which is located on the beach of Padilla Bay only a few meters from the Reservation regulatory boundary. In addition, several nearby industries including two oil refineries, major marine tanker facilities, a chemical production plant, and a natural gas co-generation facility are located on March Point, just west and northwest of the Reservation tidelands. Padilla Bay water quality has been impaired

with respect to PCBs. Potential sources of PCB pollution are predominantly off Reservation (Unified Water Assessment, 2001, 17), and therefore would not generally be governed by tribal water quality standards.

iv. Tribal Water Resource Uses.

The Tribe has traditionally used Padilla Bay for fishing of salmon, hunting of birds and harvesting of shellfish - especially crabs. The Tribe currently utilizes Padilla Bay for these purposes to a much lesser extent. It is in the interest of the Tribe to preserve the extensive network of eelgrass beds that make up Padilla Bay to ensure future salmonid fisheries survival and abundance.

v. Environmentally Sensitive Status.

A large area of the non-Reservation portion of Padilla Bay has been set aside as a National Estuarine Research Reserve. The Padilla Bay ecosystem is unique and vital to ensuring salmonid fisheries survival and abundance and the health of numerous other important species. In addition to providing important food sources for many aquatic and wildlife species, breeding areas for two endangered species, bald eagle and peregrine falcon, are located within the surrounding watershed. A heron rookery, brandt graveling area, and seagull root and/or rookery is also located in the watershed at the edge of the Swinomish regulatory boundary.

2) Similk and Turner's Bay.

i. Approximate division of ownership on the Reservation.

All of the land within the regulatory boundaries of the Reservation adjoining Turner's Bay is fee land. Of the land adjoining Similk Bay that is within the regulatory boundary of the Tribe, approximately two-fifths of it is individual trust land and three-fifths of it is fee land. About half of the uplands draining to Similk and Turner's Bays are within the regulatory boundary of the Swinomish Indian Reservation.

ii. Description: Turner's Bay.

Turner's Bay is a small, shallow estuarine wetland jutting northward off the main body of Similk Bay. It consists of mudflats and small tidal lagoons that drain into one small, shallow deepwater basin that, in turn, drains to Similk Bay. Three sand and gravel spits extending into the bay define the lagoon. Most of the bay de-waters at low tide to expose channeled mudflats. The head of the bay grades into a freshwater marsh fed by storm water runoff and Turner's Creek. Within the bay, unvegetated mudflats, sandbars, small eelgrass beds, and salt marshes are home to numerous waterfowl, herons, and plentiful shellfish and other aquatic life.

iii. Description: Similk Bay.

Similk Bay is a shallow, bowl-shaped bay surrounded by moderately sloping shores, barrier islands, and wetlands. The Bay receives water from storm water runoff from uplands in the watershed, Turner's Bay, Turner's Creek, and from marine and fresh water flushing through Skagit Bay and Deception Pass. Circulation patterns within the bay are influenced by tidal patterns exiting and entering Deception Pass from the southwest. Kiket and Skagit Islands form a natural barrier partially isolating Similk Bay from Kiket Bay and the greater Skagit Bay and from the main influence of the Skagit River. High tide salinities are as high as well-mixed estuarine waters of Puget Sound, although Similk Bay exhibits slightly depressed salinities due to freshwater influx from the Skagit River and Turner's Bay.

Almost the entire upland basin in Similk and Turner's Bay watershed within the Reservation is zoned for Forestry. The small number of homes within the watershed have on-site septic systems and private wells.

iv. Water Quality.

Water quality conditions in northwest Similk Bay and Turner's Bay have been impaired by fecal coliform contamination. Fifteen percent of measured fecal coliform concentrations in Turner's Bay exceed proposed Tribal water quality maximum exceedence standards. The increased bacterial levels are believed to be related to failure of septic systems on residential parcels along the Bays' shoreline both on- and off-reservation. These ongoing bacterial problems have resulted in closures to shellfish harvest in some areas of the basin. However, in recent years both the county and Tribe have under taken ongoing septic system repairs and upgrades, both on and off Reservation, to limit bacteria inputs into the bay. Shallow areas in Turner's Bay also have sub-optimal temperatures during summer due to natural conditions. Dissolved oxygen readings commonly failed to meet proposed standards during these high

temperature periods. The waters usually, but occasionally do not, meet pH standards.

Other current and future potential sources of pollution include runoff from lawns and gardens, runoff from roads and in-bay boat traffic, residential septic systems, on-reservation logging practices and construction activities, and natural erosion and coastal landslides along the shoreline bluff. In addition to all on-reservation sources of pollution, Similk and Turner's Bay are at risk from adjacent land use activities off-Reservation including runoff from storm water ditches and culverts and a golf course.

v. Tribal Water Resource Uses.

Historically, the waters of Similk and Turner's Bays have been heavily utilized for subsistence shellfish harvesting; salmon, smelt, herring, steelhead and chum fishing by tidal fish traps and other methods; and duck hunting. The Tribe currently utilizes the rich waters of Similk Bay for commercial, subsistence, and ceremonial fishing, and harvesting of crabs and clams including butter, horse, manila and littleneck. Turner's Bay supports abundant shellfish as well: clams in the intertidal areas and crabs in the deeper water.

In the future, the Tribe hopes to utilize the shellfish beds for potential commercial harvest and to restore the fisheries resources to their historic levels (Swinomish Comprehensive Plan, 1996). The landscape surrounding Similk and Turner's Bays is also of high scenic value due to the water resources.

vi. Environmentally Sensitive Status.

Shorelines in Similk Bay have been designated as shorelines of statewide significance by the State of Washington. Turner's and Similk Bay are environmentally sensitive due to the abundant wildlife and aquatic life that rely on this habitat for spawning, feeding and refuge. Both bays offer spawning habitat for herring with eelgrass beds that extend well up into the tidal drainage channel of Turner's Bay. The salt marshes and freshwater wetlands of Turner's Bay also provide important habitat for juvenile salmonids, including Coho salmon that have been found in the upper bay (Wyman, unpublished field report, 1996). The sand and gravel shores host spawning habitat for smelt and sand lance (Penttila, WDFW, 2000). The plentiful shellfish resources include littlenecks and manila clams- significant species to the subsistence harvest of the Swinomish Community. Eagles, herons and other waterfowl frequent the shallow waters of these bays to feed and seek refuge, as do harbor seals and fish.

3) Kiket Bay and Lone Tree Creek Lagoon.

i. Approximate Division of Ownership on the Reservation.

About three-fourths of land adjacent to Kiket Bay is fee land, with the remaining quarter of the bay, specifically the area surrounding Lone Tree Point, in tribal trust land.

ii. Description.

Kiket Bay is a broad, 36-meter deep basin semi-enclosed by barrier islands and bedrock reefs. Hope Island and the reefs extending between Lone Tree Point and Hope Island mark the south boundary of the bay, while Kiket Island and Skagit Island mark the north boundary. Beaches and intertidal zones within the watershed are sand and/or gravel or bedrock.

An arm of rock extending from Lone Tree Point encloses a small estuarine salt marsh to the north, known as the Lone Tree Creek Lagoon that drains completely or near-completely at low tide. The shoreline substrates of Lone Tree Point lagoon and area near the lagoon opening are mud, sand and gravel.

The Kiket Bay watershed is hydrologically influenced by marine water, Skagit River water, storm water runoff, and seasonal flow from Lone Tree Creek. The intertidal and beach zones near Lone Tree Point and north to the Kiket Island causeway support patchy salt marsh vegetation. Bull kelp forests and small eelgrass beds occupy the subtidal zone immediately off Lone Tree Point. Shellfish, salmon, seals, crabs and other marine life make use of Kiket Bay as do numerous other bird and wildlife species including bald eagles, herons, osprey, deer, red foxes, bobcats, elk, and many other small mammals (Mayer, 1973; Stober and Salo, 1973; Houghton, 1973; Swinomish Comprehensive Plan, 1996).

Kiket Bay shoreline is more built-out than Similk and Turner's Bays, with homes lining the shore north and south of Lone Tree Point. The homes have on-site septic systems and private or community wells. The uplands have had significant logging that also can impact the water quality of the bay. Snee-Oosh Road and many smaller roads also exist within the watershed.

iii. Water Quality.

Except for Lone Tree Point Lagoon, Kiket Bay water quality is good. Periodic shellfish tissue sampling has yielded bacteria concentrations that slightly exceed commercial harvest human health limits 25% of the time (Non-point Source Pollution, OPCD, 28). Some sources of past water quality criteria exceedences for fecal coliform have been eliminated by the

extension of sewer transmission service and capping of a sewer district outfall in Skagit Bay just below the east Hope Island passage that may have been impacting water quality in Kiket Bay watershed prior to 1995. Contamination from the Thousand Trails recreational vehicle campground located in the watershed may also contribute to elevated bacterial levels.

iv. Tribal Water Resource Use.

Historically, Lone Tree Point has been the site of a culturally valuable traditional Tribal beach seining operation to catch salmon including pink, humpies, and coho (Tribal informants, 2004). The Lone Tree Point seining operation continues to this day. Kiket Bay has also been utilized for subsistence shellfish harvesting, salmon, smelt, herring, and steelhead fishing. The Tribal Community additionally utilizes the beaches at Lone Tree Point for subsistence and ceremonial fishing, crabbing, and shellfish harvesting and family and Tribal recreational activities. Abundant juvenile salmonids make use of the shoreline area all around the bay (Klochak, pers. comm., 1997). Salmon fry also may use the Lone Tree Point Lagoon for resting.

Current restoration projects are working towards restoring fisheries resources here to historic levels. Other future Tribal economic opportunities besides fisheries and shellfish noted in the Swinomish Comprehensive Plan include high-density residential in-filling along the shoreline and low-density in-filling east of Snee-Oosh Road. Future developments may also include extending sewer and/or water transmission service to homes at the south end of Kiket Bay and to the campground.

v. Environmentally Sensitive Status.

These waters are environmentally sensitive due to the abundant wildlife and aquatic life that rely on this habitat for feeding and refuge, and the high use made of the water and land resources by humans. The salt marshes and kelp forests provide important habitat for juvenile salmonids and other aquatic life.

4) Lone Tree Creek.

i. Approximate Division of Ownership on the Reservation.

Lone Tree Creek begins on fee land and flows into individual trust land before returning to fee land. About half way through, the stream flows onto the campground Thousand Trails that is on tribal trust land.

ii. Description.

Lone Tree Creek is an ephemeral stream that flows during the wet season, usually from October through April. However, Reservation residents have reported that this creek historically flowed year-round. The stream originates in a forested wetland and flows approximately 4000 feet into Lone Tree Point lagoon. The sub-basin drains an area of approximately 608 acres. The upper reach of the creek, above Snee-Oosh Road, follows a gently sloped course through rural residential lots and small shrub and mixed forest until reaching the campground. Substrate sediments within this natural reach consist of gravel and fine sand with some silt. Stream banks are predominantly clay with mixed sand, gravel, and rare cobbles derived from glacial till. The creek enters storm-water ditches at Snee-Oosh Road and is piped across the road and under a parking lot for approximately 30 feet. The lower reach, below Snee-Oosh Road, flows in a constructed channel through a campground sparsely vegetated with conifers, deciduous trees, and shrubs. Storm-water runoff within the lower reach of the sub-basin is collected in ditches and pipes that discharge to the creek. Substrate sediments within the lower reach consist of medium to fine gravel, sand, and vegetated soil.

iii. Water Quality.

Lone Tree Creek's water quality is marginal. Several of the conventional parameters exceed draft Tribal water quality standards. Dissolved oxygen levels as well as fecal coliform measurements have failed to meet the draft Tribal standards. High bacteria levels are likely due to upstream non-point pollution sources and may be exacerbated by low flows. Low in-stream flows and non-point source pollution within the watershed are negatively impacting the creek. Low flows are evident in all Reservation streams and can result in fine sediments settling into interstitial spaces between gravels, impacting and limiting macroinvertebrate organisms and potential salmonid spawning habitat. Additionally, low flow stream environments limit habitat complexity and biodiversity. Low flows also create shallow conditions that result in marginally high temperatures and associated low dissolved oxygen that can be fatal to fish and other aquatic life.

This creek also flows through a campground, which operates pump-out stations for recreational vehicles and a sewage lagoon and septic spray field. Different parts of this system may have failed at different times to introduce bacteriological contamination to the creek from time to time. In addition, hobby farms and residential septic systems within the sub-basin may be impacting the creek. Planned extension of Tribal sewer transmission lines to the campground and homes within the sub-basin may reduce bacterial pollution entering the creek. Proposed restoration projects are geared toward improving in-stream flows, dissolved oxygen, temperature and bacterial problems.

iv. Tribal Water Resource Use.

Historically, Lone Tree Creek likely provided fresh drinking water for the tribe when they were engaged in beach seining at Lone Tree Point (Tribal Informants, pers, comm., 2004). As a perennial creek, Lone Tree Creek may have provided habitat for fish and wildlife year-round. Wildlife and fish, including salmon species, utilize Lone Tree Creek during the wet season.

v. Environmentally Sensitive Status.

The primary significance of this creek now and in the future, unless flow levels increase, is how creek waters impact water quality in Kiket Bay and groundwater quality in shallow nearby wells. Flow and creek habitat conditions preclude salmon spawning but salmon are found yearly in the lowest reach of the creek.

Lone Tree Creek enters Kiket Bay at Lone Tree Point lagoon-- a sensitive salt marsh wetland (pocket estuary) used by migrating salmonids. The lagoon is also immediately adjacent to tribal shellfish beds. Therefore, any pollution carried by the creek directly impacts important fish and shellfish resources. Bald eagles and osprey also nest in this sub-basin.

5) Snee-Oosh Creek.

i. Approximate division of ownership on the Reservation.

Snee-Oosh creek is located entirely on individual trust land.

ii. Description.

The creek flows from a large forested wetland near the crest of the Reservation uplands and enters the bay at the northern edge of the mudflats. The sub-basin is approximately 424 acres in area. The creek carves a steep-sided gorge through mixed conifer and deciduous forest. Substrate sediments include gravel and cobbles, with sand, clay and organic deposits in pools and boggy areas.

iii. Water Quality.

The overall water quality of Snee-Oosh Creek is good to marginal, however low in-stream flows and non-point source pollution within the watershed are negatively impacting the creek. Anecdotal evidence and limited scientific evidence suggest that low creek flows are a recent

development. Increasing development and use of groundwater resources within the Snee-Oosh Creek watershed may be impacting groundwater base flow into the creek. Groundwater base flow constitutes all of the creek flow during most of the summer. Low flows can result in fine substrate sediments settling into interstitial spaces between gravels, impacting macroinvertebrate organisms and potential salmonid spawning habitat. Additionally, low flows create geomorphic conditions that can result in the evolution of low habitat complexity, which limits biotic diversity. Low flows also create shallow conditions that result in marginally high temperatures and associated low dissolved oxygen that can kill fish and other aquatic life.

Ongoing, sporadic fecal coliform contamination exceeds water quality standards. The source of this contamination is unknown but may be related to failing septic systems, human and animal activity, or storm runoff. Dissolved oxygen is often below water quality standards during summer months. High turbidity and fine sediments observed in Snee-Oosh Creek impair the channel environment and may be related to logging, residential construction, or road construction.

Non-point pollution in the Snee-Oosh Creek sub-watershed comes entirely from on-Reservation sources. Existing potential pollution sources include runoff from lawns, gardens, parks, and roads, as well as forest and construction practices. Future increases in housing density may potentially introduce more of the same kinds of pollutants into Snee-Oosh Creek.

iv. Tribal Water Resource Use.

Though few salmonids have been observed in this creek in recent years, Snee-Oosh Creek has historically been an anadromous fish-bearing stream and has been designated appropriate for possible remote site egg incubator development that may provide for fisheries enhancement in the future. The creek has also been utilized for drinking water in the past.

v. Environmentally Sensitive Status.

Currently the creek provides important habitat for aquatic life and wildlife. Riparian zone and in-stream restoration efforts conducted during 1996 have successfully enhanced the stream ecosystem. Continued monitoring and enhancement efforts could return this creek to a productive, fish-bearing water resource.

6) Skagit Bay.

i. Approximate division of ownership on the Reservation.

The boundary of the portion of Skagit Bay within the regulatory boundaries of the Tribe begins north at Hope Island and ends at the most eastern point of land--Eagle's Nest where the Swinomish Channel begins. Given these delineations, at least three-fifths of the shoreline is in individual trust with the rest being made up of fee lands.

ii. Description.

Skagit Bay is a large waterbody extending south from Hope Island to Camano Island. The north half of the Reservation portion of Skagit Bay comprises a 40 meter deep basin. The south half of the Reservation portion of Skagit Bay includes expansive mudflats, sand bars, and patchy eelgrass meadows that de-water at extreme low tide. Skagit Bay is connected to Deception Pass by a deep trough that runs along the eastern shore of Whidbey Island. Cobble and gravel beaches below steep bluffs rim the mudflats and deep basin north of Pull and Be Damned Point. Snee-Oosh Creek enters Skagit Bay at the northern edge of the mudflats. Flow from the Skagit River depresses salinities and strongly influences the character of the water in Skagit Bay.

A large portion of the Skagit Bay watershed is zoned for Urban Residential development in Shelter Bay and is densely developed. Most homes within the watershed are on community sewer lines. Planned future uses within the Skagit Bay watershed may include increased housing density within the Urban and Rural Residential zones and in Shelter Bay.

iii. Water Quality.

Historic water quality data for Skagit Bay show that in the past the bay has failed to meet proposed Tribal water quality standards for fecal coliform. This pollution has since been minimized by the extension of sewer transmission services to these residential areas in the 1990s. Recent water quality monitoring shows no impairments at this time. However, excessive algae production, reported by local residents to be recent, may point to nutrient loading from a more recent source along the west shore.

Runoff and leachate from a recently capped and closed seventeen-acre dumpsite (a former gravel pit) may have impacted water quality in the past (Non-point Pollution Assessment, 2000). Potential non-point pollution sources include runoff from lawns and gardens, runoff from roads and boat traffic, and increased turbidity due to construction and logging practices. Logging may also increase nutrient loading. Skagit Bay is also subject to pollution flowing in via the Skagit River and associated sloughs and other off-Reservation sources. Under the current zoning, future increases in housing density may potentially introduce more of the same

kinds of pollutants into Skagit Bay.

iv. Tribal Water Resource Uses.

Historically, Skagit Bay, rich in numerous species of salmon, was the site of a community fishing camp and a Tribal fish trap that was located south of Snee-Oosh Creek. Located along the Pacific Flyway zone, traditional bird hunting also occurred in Skagit bay.

However, construction of the Swinomish Channel jetty changed Skagit Bay significantly by diverting some flow from the Skagit River (Borland, 1976). Mudflats have grown in size by as much as 2700 feet and wave amplitudes have changed, impacting tidal elevations (Borland, 1976). These changes likely resulted in the elimination of former oyster beds and fishing areas. The fish now bypass areas they once frequented for deeper waters much farther from the shore and outside Reservation boundaries. Oyster beds, clams, crabs and other shellfish resources near Deadman Island accessed by the community as recently as 30 years ago are no longer productive. The Tribal Community currently utilizes Skagit Bay waters for subsistence and commercial fishing, shellfish harvest and crabbing, picnicking and swimming. The salt marshes and eelgrass beds provide important habitat for juvenile salmonids that the Tribe has an interest in preserving to ensure salmonid fisheries survival and abundance (Cordell, 1986). The Tribal fishing fleet also uses the navigable channels across the Skagit Bay mudflats. In the future, the Tribe hopes for restored fisheries resources and increased harvest in Skagit Bay.

v. Environmentally Sensitive Status.

Shorelines in Skagit Bay have been designated as shorelines of statewide significance by the State of Washington. These waters are environmentally sensitive due to the abundant wildlife and aquatic life that rely on this habitat for feeding and refuge. Smelt and sandlance spawn along the Snee-Oosh shoreline. Eagles and heron and other waterfowl frequent the shallow waters of Skagit Bay to feed and seek refuge, as do harbor seals and fish. The salt marsh and mudflat ecosystem within Skagit Bay is important to ensure salmonid fisheries survival and abundance. These wetlands also serve to improve water quality.

7) Skagit River Delta.

i. Approximate division of ownership on the Reservation.

The shoreline surrounding all of McGlinn Island is in tribal trust, but the shoreline across from the east side of McGlinn island is not within the regulatory boundaries of the Tribe.

ii. Description.

Though tidally influenced, river water predominates in this small bay east of McGlinn Island. This fresh water influx is the reason the waterbody has been identified and treated as separate from Skagit Bay. The wetland is a network of sandbars, mudflats, braided channels and grass islands that grade into an estuary in Skagit Bay. Aquatic plants grow throughout the wetland. McGlinn Island has been set aside as open space for waterfowl and Tribal community uses. The wetland is host to a diverse community of birds, waterfowl, and other wildlife. Eagles frequently hunt in the area and nest nearby. A seagull rookery is located on one of the grass islands. Juvenile salmonids migrating out of the Skagit River system also utilize the wetland's rich habitat.

All of the land within this sub-basin is zoned for open space. Currently, one shelter exists within the area and is used periodically. The shelter is reached via a gravel road. A boat repair and haul out facility exisis on site and is presently leased to non-tribal operators.

iii. Water Quality.

Overall water quality within the Reservation portion of the Skagit River Delta is good. Ambient monitoring yielded occasional water quality problems due to fecal coliform bacteria, high temperatures, low pH, low dissolved oxygen, and turbidity. These may be related to natural conditions or up-river sources. Low pH and dissolved oxygen may be related to nutrient loading and associated bacterial-algal growth. The sporadic high fecal coliform concentrations may be the result of ongoing non-point source pollution. Contaminated groundwater and surface water entering the river could originate from failing or ineffective septic systems, leaky sewer lines, sewage treatment plant outfalls, and land application of treated effluent.

Current water quality data for the Skagit River Delta indicate that these waters occasionally exceed proposed water quality standards for turbidity, fecal coliform, temperature, and pH. This waterbody is influenced almost entirely by off-Reservation land use practices and activities via flow from the Skagit River and Sullivan Slough. (Non-point Source Pollution, OPCD, 29). Incoming tides may also carry pollution from adjacent watersheds. Skagit River basin uses include agriculture, dairy production, clear-cut logging, rural to urban residential, commercial, and industrial uses, and recreation.

On-Reservation lands adjacent to the Skagit River Delta wetland system

are very low use areas. Existing potential sources of pollution from on-Reservation include increased turbidity from natural erosion, and a small amount of runoff from occasional use of a gravel road. If construction plans for a cultural museum go ahead, runoff from roads and parking lots with increased traffic may introduce hydrocarbons to the wetland. Runoff from landscaped areas may introduce nutrients and inorganic chemicals from herbicides, pesticides, and fertilizers. In addition, air-borne chemicals from the boat yard and bacterial contamination from the museum septic system may also enter the wetland.

iv. Tribal Water Resource Uses.

The Tribal Community currently utilizes the Skagit River wetland for subsistence and ceremonial fishing, duck hunting, and swimming. In the future, the Tribe hopes to restore the fisheries resources to historic levels, which includes restoring and maintaining habitat in and around the Skagit River Wetland for juvenile and adult salmonids (Swinomish Comprehensive Plan, 1996).

v. Environmentally Sensitive Status.

These waters are environmentally sensitive due to the abundant wildlife and aquatic life that rely on this habitat for feeding and refuge, especially juvenile and adult salmonids, eagles, waterfowl, and nesting seagulls. The wetland is host to a diverse community of birds, waterfowl, and other wildlife. Eagles frequently hunt in the area and nest nearby. A seagull rookery is located on one of the grass islands. Juvenile salmonids migrating out of the Skagit River system also utilize the wetland's rich habitat. Aquatic plants also grow throughout the wetland. The wetland system itself also serves important water quality and hydrologic functions. The landscape is of high scenic value due to the water resources present. McGlinn Island has been set aside as open space for waterfowl and Tribal community uses.

8) Swinomish Channel.

i. Approximate Division of Ownership on the Reservation.

About two-fifths of the uplands bordering the Swinomish Channel is in tribal trust, another two-fifths is in individual trust and about 1/5 is on fee land but over half of this fee land is Tribally-owned.

ii. Description.

The Reservation uplands bordering the Swinomish Channel comprise approximately 8.4 miles of shoreline, extending from Padilla Bay to Hole

In The Wall at the southern tip of the Reservation. At treaty time, the Swinomish Channel was a shallow estuarine tidal channel system and distributary for the Skagit River. The Army Corps of Engineers has been dredging and maintaining the channel as a navigable waterway since the beginning of the 20th century. The dredged channel extends across mudflats and sea grass meadows in Padilla and Skagit bays. Dredge spoils deposited on the shores of the channel have replaced the mud flats of the original system with salt marshes and sandy beaches. The majority of the channel banks are armored. Though Skagit River water still enters and influences the hydrology and chemistry of the channel, the greater part of Skagit River flow has been deflected into Skagit Bay by a constructed jetty (Borland, 1976; Yates, 2001). Combined tidal and riverine processes in the channel result in a northerly net flow averaging 1.5 to 1.7 feet per second at peak tides (Rensel and Miller, 1985).

A remnant channel island/sand bar has been augmented with dredge spoils to form a shrub-vegetated causeway connecting McGlinn Island to the Skagit flats. Bulkheaded dikes are constructed in the agricultural lands in the north to keep tidewaters out. Numerous seeps and springs feed a network of wetlands at the toe of the bluff along the west side of the agricultural lands. In the northern agricultural lands, surface runoff is collected in remnant sloughs and agricultural ditches and carried to the channel.

iii. Water Quality.

Ambient water quality monitoring of the Swinomish Channel has been conducted at Kwonesum, a residential development, at the opening of the north agricultural slough, at Shelter Bay Marina, and at the Swinomish fishing docks. Water quality within Swinomish Channel is generally acceptable and within proposed Tribal Water Quality Standards. Low level, episodic fecal coliform bacteria contamination was found in the Swinomish Channel from Shelter Bay to Kwonesum and may pose a human health risk to swimmers making use of the Swinomish docks. Intermittent high turbidity may impact aquatic life, including salmon and shellfish in the channel.

The Swinomish Channel is at risk of water quality contamination from several on-Reservation point and non-point sources. The Shelter Bay sewage treatment plant outfall introduces bacteriological contamination, nutrients, and chloride and other inorganic chemicals. Fecal coliform exceedences may also be attributed, at least in part, to non-point source bacteriological contamination from the septic field at Kwonesum (a residential development) and storm-water runoff from hobby farms and high-density areas. Runoff from the log yard may cause nutrient loading

and contamination from chemicals used to treat the logs. Runoff from lawns, gardens, and agricultural lands may introduce nutrients and inorganic chemicals from herbicides, pesticides, and fertilizers. Air-borne and water-borne chemicals from the boat yard may also enter the channel in spite of the water collection and treatment system in place. Runoff from a dense network of roads and high traffic volumes in the area along with boat traffic on the channel may result in high hydrocarbon concentration in the channel. Also, on-reservation logging, construction, and agricultural practices may contribute to high turbidity.

Off-Reservation use of the Swinomish Channel includes the LaConner Regional Sewer Treatment Plant outfall and the LaConner Marina, which are located directly opposite the Swinomish Village.

iv. Tribal Water Resource Value.

Historically, the Tribe used the Swinomish Channel for catching salmon using specially designed family traps placed along the Channel (Tribal informant, 2004). The Swinomish Channel has been a primary migration route for salmonids (Borland, 1976). When the Army Corps of Engineers began dredging the channel at the beginning of the 20th century, the Corps not only made the channel more deep and narrow, but also dumped the dredge spoils on the Reservation side, effectively destroying much of the shellfish habitat in the process. The channeled wetlands along the shore, though heavily altered, provide important habitat for juvenile salmonids. Harvestable oyster beds have seeded within the rip-rap along the north Channel.

Tribal Community members use the Channel for fishing, swimming, crabbing, hunting, boat moorage, and navigation. Swinomish Channel waters are also utilized to dilute effluent from several point source discharges. The sewage treatment plant outfall for Shelter Bay has been emptied into the Channel, and storm-water drains for Swinomish Village and Shelter Bay, and storm-water drains for the Skagit Bay Boatyard, Dunlap Log Yard, and Tribal Fish Plant empty into the Swinomish Channel.

The low level, episodic fecal coliform bacteria contamination mentioned in the water quality section may pose a human health risk to swimmers making use of the Swinomish docks. However, net north flow in the channel and excellent water quality with respect to bacteria in east Skagit Bay indicate that the bacteria pollution is not impacting potential shellfish growing areas in Skagit Bay.

Tribal Community members also frequently hunt in this area. The lowlands along the north part of the channel are home to numerous

migrating birds and waterfowl following the Pacific Flyway. Extensive networks of wetlands in the lowlands off the shore provide shelter and food for the birds.

In the future, the Tribe may expand fisheries operations on the channel, construct a public marina proposed at the north end of the channel, and increase density within the village and Shelter Bay.

v. Environmental Sensitivity.

These waters are environmentally sensitive due to the abundant wildlife and aquatic life that rely on this habitat for feeding and refuge. Eagles and herons and other waterfowl frequent the shallow waters of these bays to feed and seek refuge, as do harbor seals and fish. Sea otters, seals, peregrine falcons, cormorants, kingfishers and other wildlife also make use of the area. The salt marshes provide important habitat for juvenile salmonids. These wetlands also serve to improve water quality. The shorelines of the Swinomish Channel have been designated as shorelines of statewide significance by the State of Washington.

9) Munks Creek.

i. Approximate division of ownership on the Reservation.

The majority of Munks Creek flows through individual trust land, with only approximately one-eighth of the stream in the upper reach, near the head waters, flowing through fee land.

ii. Description.

Munks Creek sub-basin drains an area of approximately 303 acres. Numerous seeps and gullies along the east slope of the Reservation drain into a narrow bog that feeds Munks Creek. The creek channel widens into a second small wetland approximately 600 feet from its headwaters and then continues for another 2800 feet before entering the Swinomish Channel. The creek carves a steep-sided gorge through mixed conifer and deciduous forest. Historically, stream flow within the upper reach just above Reservation Road was substantial enough to fill a ceremonial bathing tub. In recent years, flow in the upper reach of the creek has decreased to almost nothing during the summer. The stream and wetland system of Munks Creek and the adjacent dense forests are home to many aquatic and wildlife species including deer, otter, herons, and other birds. Munks Creek enters the Swinomish Channel on a relatively isolated and undisturbed stretch of beach that is home to river otters and other wildlife. The area is also frequented by great blue herons that nest nearby.

iii. Water Quality.

Munks Creek is monitored near the mouth of the creek, where it enters the Swinomish Channel above the area of tidal influence. Low in-stream flows and non-point source pollution within the watershed are negatively impacting the creek. Some bacterial contamination has been noted during ambient monitoring in the past but it appears to be improving. The creek has very low summer flows and low year-round flows. Low flows can result in fine substrate sediments settling into interstitial spaces between gravels, impacting macroinvertebrate organisms and potential spawning habitat. Additionally, low flows create geomorphic conditions that can result in the evolution of low habitat complexity, which limits biotic diversity. Low flows also create shallow conditions that result in marginally high temperatures and associated low dissolved oxygen that can kill fish and other aquatic life. Anecdotal evidence and limited scientific evidence suggest that low creek flows are a recent development.

Overall, current and historic water quality data indicate that Munks Creek meets proposed water quality standards for conventional parameters except for low pH. A bog wetland may be the cause of the low pH found in the stream reach between the headwaters wetland and the lower wetland.

Existing potential pollution sources within the sub-basin include runoff from Reservation Road, which may introduce hydrocarbon contamination to the stream, and forest practices, which may increase turbidity, increase temperature, decrease dissolved oxygen, and increase nutrient loading. Though the Kwonesum development is located outside the surface watershed sub-basin, drawdown at the Kwonesum community well may impact base flow contribution to in-stream flows in Munks Creek, which is vital to salmon and other aquatic life.

iv. Tribal Water Resource Use.

Historically, this creek has been an important place to the Swinomish people for cultural and spiritual practices. The Tribal Community did use Munks Creek up until fairly recently for spiritual and cultural purposes, including spiritual bathing, but has since discontinued using this area for traditional reasons (Tribal informant, 2004). Some now abandoned homes along the creek pulled drinking water from the creek. Munks Creek has historically been an anadromous fish-bearing stream. The creek was also once used for an old fish hatchery that raised chum salmon and has been designated appropriate for possible remote site egg incubator development for fisheries enhancement in the future.

v. Environmental Sensitivity.

Munks Creek is an important and sensitive cultural and spiritual resource. The creek also provides important habitat for aquatic life and wildlife, including river otters and deer. This creek has the potential, through enhancement efforts, to be a productive, fish-bearing water resource.

10) Fornsby Creek.

i. Approximate division of ownership on the Reservation.

Fornsby Creek begins in fee land and continues on for about 3/5 the length of the stream, runs through tribally owned fee land, and finally ends in individual trust land that adjoins the Swinomish Channel.

ii. Description.

The Fornsby Creek sub-basin drains an area of approximately 252 acres. Fornsby Creek arises from numerous seeps and small wet depressions along the hilltop and east slope of the Reservation above the south end of the agricultural lands. The upper reach of the creek flows in a steep-sided gorge through mixed conifer and deciduous forest from the hill top east approximately 2700 feet. The lower reach of the creek flows an additional 5200 feet into the Swinomish Channel.

Stream banks are mucky clay with a thick layer of organic debris under canopied banks in the upper reach. When Fornsby Creek enters the agricultural flat lands, the stream channel is confined to diked agricultural ditches until it reaches the Swinomish Channel. The stream gradient through the agricultural lands is nearly flat. Two or more agricultural ditches or remnant sloughs discharge to the lower reach of the creek. Since this waterbody is at sea level, a tide gate at the mouth of the creek prevents tidal inundation. The upper reach of Fornsby Creek and the adjacent forest is habitat to numerous aquatic and wildlife species. The lower reach of the creek supports Sticklebacks and other tolerant aquatic species. The area is also frequented by great blue herons that nest nearby.

iii. Water Quality.

Since 1997, Fornsby Creek has been monitored at the Cornwall family farm, located at the base of the bluff where the creek changes gradient and flows across the flats into the Swinomish Channel. The creek is now monitored extensively at the lower reach as well. Overall water quality in Fornsby Creek is good, however low in-stream flows and non-point source

pollution within the watershed are negatively impacting the creek. Several of the conventional parameters measured occasionally exceed proposed Tribal water quality standards. Temperatures are occasionally high and dissolved oxygen may be low during the summer months. Turbidity has been greater than expected 50% of the time. Fecal coliform was also occasionally high. Fornsby Creek is a drinking water source for one household.

The creek is impaired due to very low summer flows and low year-round flows. Low flows can result in fine substrate sediments settling into interstitial spaces between gravels, impacting macroinvertebrate organisms and potential spawning habitat. Additionally, low flows create geomorphic conditions that can result in the evolution of low habitat complexity, which limits biotic diversity. Low flows also create shallow conditions that result in marginally high temperatures and associated low dissolved oxygen that can kill fish and other aquatic life. Anecdotal evidence and limited scientific evidence suggest that low creek flows are a recent development.

Very little current or historic non-point pollution data exist for Fornsby Creek. Recent water quality monitoring has identified high turbidity, low dissolved oxygen concentrations, and moderately high fecal coliform concentrations in the upper reach of Fornsby Creek relative to proposed water quality standards. Potential sources of pollution in the upper reach include failing residential septic systems, logging practices, residential gardening and yard care, and construction activities. Water quality impacts along the lower reach are expected to be severe. This is a target area for future monitoring and restoration because it harbors important off-channel habitat for rearing and migrating salmon.

Current potential sources of pollution within the lower reach are related to agricultural practices which may contribute nutrients, pesticides, herbicides, nuisance algal growth due to nutrient loading, temperature degradation due to lack of riparian cover, low dissolved oxygen concentration due to high temperatures, and sediment loading. Fee lands within this sub-basin also overlie the recharge zone for groundwater aquifers.

iv. Tribal Water Resource Uses.

Currently, Fornsby Creek is the primary source of drinking water for one household within the sub-basin. The creek is also used by fish and wildlife and may provide for fisheries enhancement in the future.

v. Environmental Sensitive Areas.

The creek also provides important habitat for aquatic life and wildlife, including river otters and deer. This creek has the potential, through enhancement efforts to return to a productive, fish-bearing water resource.

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D) The Values of the Water Bodies to the Tribe.

Each waterbody has a unique combination of cultural, economic, and environmental value that affects its priority to the Tribal Community.

Cultural value is assessed based on five selection factors. Watersheds that are currently, or were historically, used for spiritual or ceremonial purposes received two points. Watersheds that support recreational uses received one point for secondary contact recreational activities (boating, wading, etc.) or two points for primary contract activities (swimming, other full-immersion activities). Watersheds that support traditional harvest resources received one point each for significant terrestrial resources and/or significant aquatic resources. Watersheds with culturally significant species were given two points. Finally, watersheds containing known or potential archeological or historic sites received two points. No attempt was made to scale these scores to reflect frequency or importance of utilization or quantity or quality of resources. As such, the assessment is a crude measure of cultural significance and may benefit from refinement as additional assessment tools become available.

Economic value is determined based on five major economic uses of shellfish or fish (including whether the water source is used for fishing or shellfishing) logging, or agriculture, whether it has development potential, or is utilized for tribal economic benefit.

Environmental value was evaluated using three criteria. Two points were given for watersheds with a known presence of sensitive species, including species listed as endangered or threatened or proposed for listing. Watersheds received up to two points if a significant part of the upland watershed was relatively undisturbed. Finally, two points were given to each watershed or sub-watershed containing critical areas, including groundwater recharge and aquifer protection areas, geologic hazard areas, critical habitat, streams, creeks, springs, riparian areas, and wetlands.

Prioritization matrix for Swinomish Indian Reservation watersheds and sub-watersheds. Assesses priority based on cultural, economic, and environmental value of each basin as well as relative impairment of aquatic systems quality.
Input for map garnered from scoping meeting with Tribal members.

Criteria	Selection Factor	Padilla Bay	Similk and Turner's Bay	Kiket Bay	Lone Tree Creek	Skagit Bay	Snee-Oosh Creek	Skagit River Delta	Swinomish Channel	Munks Creek	Fornsby Creek
Cultural value (max 2 pts. ea.)	Spiritual or ceremonial utilization		2	2	2			2		2	
	Recreational utilization	1	1	1		2		2	2	2	
	Presence of traditional harvest resources	2	2	2	1	2	1	2	2	1	1
	Presence of culturally significant species	2	2	2	2	2	2	2	2	2	2
	Presence of known or potential archaeological or historic sites		2	2		2	2		2	2	2
Economic value (max 2 pts. ea.)	Shellfish/fishing	2	2	2		2			2		
	Logging		2	2	2	2	2		2	2	2
	Agriculture								2		
	Development potential	2	1	1	1	2	2		2	1	2
	Tribal economic	2		2	2				2		
Environmental value (max 2 pts. ea.)	Known presence of sensitive species	2	2	2		2		2	2		
	Relatively undisturbed upland		2	2	2		2	2	1	2	2
	Presence of critical areas subject to disturbance	2	2	2	2	2	2	2	2	2	2
VALUE SCORE		*15*	*20*	*22*	*14*	*18*	*13*	*14*	*23*	*16*	*13*
VALUE-BASED PRIORITY RANK		*6*	*3*	*2*	*7*	*4*	*9*	*7*	*1*	*5*	*9*
Environmental condition	Water quality (see Table 6, selection factor 1)	1	2		1		1	1	1	1	1
	Water quantity (max 1 pt.)				1		1			1	1
	Habitat (see Table 6, selection factors 2 and 3)		1	1	1	1			1		1
	Biologic resources (see Table 6, selection factor 4)	1	1	1		1		1	1		
IMPAIRMENT SCORE		*2*	*4*	*2*	*3*	*2*	*2*	*2*	*3*	*2*	*3*
IMPAIRMENT-BASED PRIORITY RANK		*5*	*1*	*5*	*2*	*5*	*5*	*5*	*2*	*5*	*2*
OVERALL SCORE		17	24	24	17	20	15	16	26	18	16
RESTORATION PRIORITY RANK		6	2	2	6	4	10	8	1	5	8

5. The Tribe Has the Capability Required to Administer an Effective Water Quality Program.

A. The Tribe Has Extensive Previous Management Experience.

The SITC has a long and distinguished record of administering federal and tribal programs and obtaining federal grants to protect and improve the health and welfare of tribal members and the environment of the Reservation. The SITC has a water quality program, public health programs, an air quality program, and a noxious weed control program. Additionally, the Tribe has successfully cleaned up a number of hazardous waste sites on the Reservation. For instance, in November 2002, cleanup of the PM Northwest site was officially completed. In the 1960s, the site had been used to store chemical waste from refineries in four disposal ponds. The waste site had been identified as a threat to the reservation aquifer. Fifty-eight thousand tons of chemicals were removed at a cost of over $4 million pursuant to the EPA's administrative order on consent. SITC provided oversight for the project.

SITC enforces a tribal environmental policy act, an air quality act, a shoreline management act, and a land clearing act. *See* Tribal Environmental Policy Act, Air Quality Act, Shorelines and Sensitive Areas Ordinance, and Land Clearing Act, attached asExhibits 19, 20, 21 and 22. The Tribe recently was granted TAS under Section 105 of the Clean Air Act, 42 USC § 740, to develop and implement an air pollution control program. The Tribe is in the process of promulgating a number of additional environmental ordinances, including a Hazardous Substances Ordinance.

As described in detail below, the Swinomish Water Resources Program employs four fulltime employees and four part-time employees. The Water Resources Program has completed various mapping and modeling projects for both groundwater and surface water on the Reservation. In addition, the program engages in monitoring of water quality and stream flows, as well as performing other functions, such as assessing wetlands and conducting amphibian surveys. In addition to developing water quality standards, the Water Resources Program is also currently drafting an aquifer and groundwater protection ordinance and a marine sediment quality ordinance.

The SITC administers a public health program for the SITC and three other area Tribes. The program is funded by the U.S. Indian Health Service, Northwest Washington Service Unit. The service unit sanitarian inspects septic systems for tribal members who are not on the tribal sewage system and provides instruction on sanitation and regulatory oversight for food establishments and food prepared for public gatherings.

The SITC manages a noxious weed control program using integrated pest management techniques. Annually, volunteers and members of the natural resources crew remove approximately 100 tons of a noxious weed called spartina from tribal tidelands.

The Tribe's environmental and public health programs are described in detail